Notice of Allowability	**Application No.** 09/847,037	**Applicant(s)** MURREN ET AL.	
	Examiner Thanhnga B. Truong	**Art Unit** 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *9/28/07*.

2. ☒ The allowed claim(s) is/are *8-16,18,19,21-23,25-27,29,35,37-39 and 45-49*.

3. □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) □ All b) □ Some* c) □ None of the:

   1. □ Certified copies of the priority documents have been received.
   2. □ Certified copies of the priority documents have been received in Application No. _____ .
   3. □ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. □ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. □ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

   (a) □ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

   1) □ hereto or 2) □ to Paper No./Mail Date _____.

   (b) □ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. □ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. □ Notice of References Cited (PTO-892)
2. □ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 8/30/07
4. □ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. □ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *9/28/07* .
7. ☒ Examiner's Amendment/Comment
8. □ Examiner's Statement of Reasons for Allowance
9. □ Other _____.

T. B. Truong TBT
AU 2135

DETAILED ACTION

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Nathan T. Grebasch on September 28, 2007. During the telephone conference, Mr. Grebasch has agreed and authorized examiner to amend claims 8, 13, 18-19, 22, 26, 35, 37, 46, and 47, wherein the independent claims 8, 19, 26, and 35 now include the limitation of claims 17, 24, 30, and 36 respectively. Mr. Grebasch has also agreed and authorized examiner to add claims 47-49; and cancel claims 1-7, 17, 20, 24, 28, 30-34, 36, and 40-44 without prejudice or disclaimer.

CLAIMS:

a. Please cancel claims 1-7, 17, 20, 24, 28, 30-34, 36, and 40-44.

b. <u>*Referring to claim 8:*</u>

Please replace claim 8 as follows:

One or more computer-readable media comprising computer-executable instructions that, when executed by a processor, direct a the processor to perform acts including:

receiving a request to perform an operation;

checking whether to access a business logic module in order to generate a result for the requested operation, wherein the business logic module contains problem-solving logic that produces solutions for a particular problem domain, and wherein the business logic module employs interaction-based definitions in which a component which performs an operation associated with the request is defined by a series of request-response interaction definitions that can be satisfied to perform the operation;

obtaining, from the business logic module, a set of zero or more additional tests to be performed in order to generate the result;

performing each additional test in the set of tests if there is at least one test in the set of tests;

checking a set of pluggable rules to determine the result of the requested operation; and

returning, as the result, a failure indication if checking the business logic module or checking the set of pluggable rules indicates that the result is a failure, otherwise returning, as the result, a success indication,

wherein the set of pluggable rules includes a plurality of permission assignment objects, wherein each of the permission assignment objects associates a user with a particular role, wherein each particular role is associated with one or more permissions, and wherein each of the one or more permissions identifies a particular operation and context on which the operation is to be performed.

c. *Referring to claim 13:*

Please replace claim 13 as follows:

One or more computer-readable media as recited in claim 12, wherein the high-level permission concepts include a type of operation to be performed and a context, wherein the context allows identification of what the type of operation to be performed is to be performed on.

d. *Referring to claim 19:*

Please replace claim 19 as follows:

A method comprising:

providing high-level permission concepts, including context and operation, for security rules;

allowing a set of security rules to be defined using the high-level permission concepts, wherein the set of security rules allows permissions to be assigned to users of an application, in which the set of security rules includes a plurality of permission assignment objects, in which each of the permission assignment objects associates a user with a particular role,, in which each particular role is associated with one or more permissions, and in which each of the one or more permissions identifies a particular operation and context on which the operation is to be performed; and determining, based at least in part on a permission assigned to a user, whether to permit an operation based on a request by the user,

wherein the determining further comprises determining whether to permit the operation requested by the user based at least in part on accessing a business logic module to identify one or more additional tests to perform to determine if the operation is permitted, and further comprising performing the one or more additional tests, wherein the business logic module contains problem-solving logic that produces solutions for a particular problem domain, and wherein the business logic module employs interaction-based definitions in which a component which performs the operation is defined by a series of request-response interaction definitions that can be satisfied to perform the operation.

e. *Referring to claim 22:*

Please replace claim 22 as follows:

A method as recited in claim 19, wherein the high-level permission concepts include an operation and a context, wherein the operation allows identification of a type of operation to be performed and the context allows identification of what the operation is to be performed on.

f. *Referring to claim 26:*

Please replace claim 26 as follows:

A method comprising:

receiving a request to perform an operation associated with business logic module, wherein the business logic module contains problem-solving logic that produces solutions for a particular problem domain, and wherein the business logic module employs interaction-based definitions in which a component which performs the operation is defined by a series of request-response interaction definitions that can be satisfied to perform the operation;

accessing a set of low-level rules, wherein the low-level rules, including at least one of modifying, deleting, viewing, approving, or creating, are defined in terms of high-level concepts, the low-level rules further include a plurality of permission assignment objects, wherein each of the permission assignment objects associates a user with a particular role, wherein each particular role is associated with one or more permissions, and wherein each of the one or more permissions identifies a particular operation and context on which the operation is to be performed;

checking whether a user requesting to perform the operation is entitled to perform the operation based at least in part on the set of low-level rules; and

returning an indication of whether the operation is allowed or not allowed,

wherein the set of low-level rules can be replaced with another set of low- level rules without altering the business logic module.

g. *Referring to claim 35:*

Please replace claim 35 as follows:

An architecture comprising:

a plurality of resources including a processor to process requests;

a business logic layer to process, based at least in part on the plurality of resources, requests received from a client, wherein the business logic layer contains problem-solving logic that produces solutions for a particular problem domain, and wherein the business logic layer employs interaction-based definitions in which a component which performs an operation corresponding to an individual request is defined by a series of request-response interaction definitions that can be satisfied to perform the operation; and

a pluggable security policy enforcement module, separate from the business logic layer, to enforce security restrictions on accessing information stored at the plurality of resources based on the operation corresponding to the individual request,

wherein the pluggable security policy enforcement module defines high-level permission concepts for security rules and further defines a set of security rules using the high-level permission concepts which include context and operation.

h. *Referring to claim 37:*

Please replace claim 37 as follows:

An architecture as recited in claim 35, wherein the operation allows identification of a type of operation to be performed and the context allows identification of what the type of operation is to be performed on.

i. *Referring to claim 39:*

Please replace claim 39 as follows:

An architecture as recited in claim 35, wherein the pluggable security policy enforcement module is configured to determine, based at least in part on a permission assigned to a user and on one or more additional tests identified by accessing the business logic layer, whether to permit a type of operation to access information at the plurality of resources.

j. *Referring to claim 46:*

Please replace claim 46 as follows:

A method as recited in claim 19, wherein the type of operation is selected from the group consisting of creation, deletion, viewing, approval, and modification.

k. *Referring to claim 18:*

Please replace claim 18 as follows:

One or more computer-readable media as recited in claim 8, wherein each of the permission assignment objects further identifies whether the one or more permissions in the particular role are granted to the user or denied to the user.

l. *Referring to claim 25:*

Please replace claim 25 as follows:

A method as recited in claim 19, wherein each of the permission assignment objects further identifies whether the one or more permissions in the particular role are granted to the user or denied to the user.

m. *Referring to claim 47:*

Please add claim 47 as follows:

A method as recited in claim 22, wherein the type of operation is selected from the group consisting of creation, deletion, viewing, approval, and modification.

n. *Referring to claim 48:*

Please add claim 48 as follows:

One or more computer-readable media as recited in claim 13, wherein the type of operation is selected from the group consisting of creation, deletion, viewing, approval, and modification.

o. *Referring to claim 49:*

Please add claim 49 as follows:

An architecture as recited in claim 37, wherein the type of operation is selected from the group consisting of creation, deletion, viewing, approval, and modification.

Information Disclosure Statement

3. The information disclosure statement (IDS) filed on August 30, 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Allowable Subject Matter

4. Claims 8-16, 18-19, 21-23, 25-27, 29, 35, 37-39, and 45-49 are allowed.

The following is an examiner's statement of reasons for allowance: see attached Interview Summary.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Thanhnga B. Tr
Primary Examiner AU2135

TBT
September 28, 2007